



# Cornerstone Community Bank cuts replication time by 67% with vRanger

Cornerstone Community Bank is one of the largest locally owned and operated banks in Hamilton County, Tennessee. Since opening its first branch in 1996, Cornerstone has focused on delivering friendly, personal service to customers, of which 85 percent are businesses. The bank has about 130 employees, including two full-time IT staffers. For fast and reliable replication, backup and restore capabilities for its virtual environment, Cornerstone turned to Dell™.

Cornerstone's IT infrastructure includes about 145 PCs and 30 Windows-based servers that include 27 virtual machines (VMs). In addition, the bank has three VMware ESX hosts at its primary data location and two ESX hosts at a secondary location for backup and disaster recovery.

Cornerstone was unhappy with the performance and reliability of the tool it was using to replicate data to the secondary site. "The performance

we were seeing was slower than it should have been," explains Randy Dover, vice president and information technology officer of Cornerstone Community Bank. "And there were too many errors. Sometimes the tool would just lose VMs at our remote site and would start replicating from scratch. Since we have a few machines that are more than 100 gigabytes and one that is almost 400 gigabytes, that would take an unacceptably long time to complete—90 hours for the 400 gigabyte machine alone."

In addition, Cornerstone lacked a backup solution designed for VMs, so recovery was cumbersome and time-consuming. "Our backup process was to do a flat file backup on our virtual servers, just as if they were physical servers, and back up those to tape every night," says Dover. "I knew that if we lost a VM for some reason, such as losing one of the hard disk files, the restore would be difficult. We would

## Customer profile



<b>Company</b>	Cornerstone Community Bank
<b>Industry</b>	Banking and Finance
<b>Country</b>	United States
<b>Employees</b>	130
<b>Web site</b>	<a href="http://cscbank.com">cscbank.com</a>

## Challenge

Cornerstone Community Bank recognized that it needed an efficient, reliable replication solution and a backup and recovery tool designed for its virtual environment, which includes 27 virtual machines.

## Solution

The bank gained simplified, fast and reliable VMware® ESX and ESXi replication, and accelerated data recovery, when it implemented vRanger®.

## Benefits

- Decreased replication time by 67%
- Reduced server restore time substantially, saving IT staff time and enhancing customer satisfaction
- Improved accuracy and reliability of backups
- Enabled file-level restores in less than 5 minutes

## Application areas

- [Backup and Recovery](#)
- [Virtualization](#)

"We were spared 20 to 25 hours of stressful, around-the-clock work, and those critical servers were back up for our customers before lunch, instead of the next day, because of vRanger."

*Randy Dover,  
Vice President and Information Technology Officer,  
Cornerstone Community Bank*

have to build a new VM from scratch, install the Windows operating system, install the backup agent, find the right tape that had the backup of the server we needed to restore, and then do a flat file restore from tape, just as if the VM was a physical box.”

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#### **Fast, secure and reliable**

A search of the marketplace led Cornerstone to the vRanger solution. VMware backup and replication are accelerated and storage requirements are dramatically reduced by vRanger. It also delivers simple, fast and reliable VMware ESX and ESXi replication, optimized for image-based data handling. vRanger reads only active blocks from the image using patent-pending Active Block Mapping, minimizing backup windows and storage needs. And instead of sending VM data through a single, central server, it uses distributed processing to minimize impact on host operations.

With its patent-pending capabilities, vRanger is the fastest, most reliable and most secure VMware backup solution on the market.

#### **Replication time reduced by two-thirds**

Cornerstone achieved the performance it needs in a replication solution, including cutting replication time for its largest VM by 67 percent, using vRanger. “Since we began using it about two years ago, we have increased the number of VMs in our environment from 9 to about 27,” reports Dover. “Yet replication is performing significantly better replicating those 27 VMs than our previous solution did with just 9. For instance, replicating our largest VM, which is almost 400 gigabytes, used to take 90 hours. Replication takes only 30 hours with vRanger.”

In addition to delivering outstanding performance, vRanger has proven to be reliable and effective. “We used to have problems with our old tool losing VMs, but I have not seen it happen a single time with vRanger,” says Dover. “We are very happy with it.”

The restore process at Cornerstone has accelerated from hours or days to just minutes because of vRanger. This not only saves valuable IT staff time but also enables the bank to deliver the service its customers need and expect.

“Because you don’t have to know anything about the original VM, restoring from a backup is quick and easy with vRanger,” explains Dover. “The restore creates the VM with the same configuration, memory, hard drive, etc. as the original. For instance, we have a couple of machines that host our customer Web sites. A security provider pushed out an update to a security agent, causing those machines to malfunction and blue screen. I was able to restore the first server, which had one 25-gigabyte hard drive and one 7-gigabyte hard drive, in just 6 minutes 18 seconds, and then I restored the other one just as fast.”

Dover adds, “We were spared 20 to 25 hours of stressful, around-the-clock work, and those critical servers were back up for our customers before lunch, instead of the next day, because of vRanger.”

Ease of use has also been exceptional with vRanger. “A few days after I installed vRanger, I tested to see how easy a restore would be,” says Dover. “I was able to restore two domain controllers (DCs) and five servers in less time than it used to take to restore just one DC—even though I had never done a similar restore with vRanger. Specifically, I restored two DCs in under four hours; then in another four hours,

I also restored five servers, including a Microsoft Exchange Server, a file/print server and a couple of other critical production servers. In contrast, at my previous job, restoring just one DC took at least 8 hours, and sometimes 12 to 14 hours.”

Sometimes a full restore isn’t needed, so Cornerstone also appreciates the speed and flexibility of vRanger’s file-level restore (FLR) capability. “There have been occasions when we needed to restore a single file,” Dover says. “We can browse to a savepoint, browse to a file to restore, choose the destination and restore the file—all in well under five minutes from start to finish—with vRanger FLR. In fact, I can restore a file using vRanger FLR more quickly than I can load a tape to restore from a tape library.”

In today’s world of overblown marketing claims, Dover gives vRanger perhaps the highest praise an IT professional can give to any software: “This solution does what it says it will do. If you’ve got a virtual environment, you need vRanger.”

#### **Technology at work**

##### **Software**

Microsoft® Exchange Server

VMware® ESX Server

VMware ESXi Server

vRanger®

Windows Server®

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